

any in our Army, particularly fire supporters, are talking about synchronizing effects in support of the maneuver commander. While this is not a new concept, truly integrating lethal and nonlethal fires and effects to achieve the commander's intent can be a daunting task.

The Combined Joint Task Force 180 (CJTF-180) in Afghanistan is executing a method for synchronizing joint fires and effects, which not only meets the CJTF commander's intent, but also has served as a model for lethal and nonlethal integration throughout Central Command (CENTCOM). Within the CJTF-180 staff, the joint fires element (JFE) uses fused intelligence to identify opportunities to conduct integrated operations along three lines: Enable Afghan institutions to thrive, Help remove the causes of instability and Deny the enemy sanctuary and counter terrorism.

This article describes the process and organizational structure for CJTF-180's effects-based operations (EBO), the impact EBO is having on meeting the commander's intent and the future of fire supporters moving forward as enthusiastic proponents of EBO.

EBO Defined. US Joint Forces Command (JFCOM) defines an effect as "the physical, functional or psychological outcome, event or consequence that results from specific military or non-military actions." EBO is "A process for obtaining a desired strategic outcome or 'effect' on the enemy through the synergistic, multiplicative and cumulative application of the full range of military and nonmilitary capabilities at the tactical, operational and strategic levels."

In his paper for the Army War College, Lieutenant Colonel Allen W. Batschelet submits that EBO includes the "identification and engagement of an enemy's vulnerabilities and strengths in a unified, focused manner and uses all available assets to produce specific effects consistent with the commander's intent." He further states that EBO is about "producing desired futures." In a sense, that is exactly why fire supporters must continue to talk about synchronizing *all* effects in support of the maneuver commander.

These definitions provide the foundation for CJTF-180's EBO in Afghanistan.

The CJTF-180 Operational Environment. As we begin to explain how the commander's intent is translated into full-spectrum effects, it is important to understand the framework, or operational environment, of the Afghanistan Combined/Joint Area of Operations (CJOA).

We are waging continuous, decisive combat operations within about one-third of southern Afghanistan along the Pakistani border (see the map in Figure 1).

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu ald be aware that notwithstanding and DMB control number.	tion of information. Send comment parters Services, Directorate for Inf	s regarding this burden estimate formation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	his collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE FEB 2004		2. REPORT TYPE		3. DATES COVE 00-01-200 4	ERED 4 to 00-02-2004	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
Effects-Based Operations in Afghanistan. The CJTF-180 Method of				5b. GRANT NUMBER		
Orchestrating				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER			
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Field Artillery,PO Box 33311,Fort Sill,OK,73503-0311				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distribut	ion unlimited				
13. SUPPLEMENTARY NO	TES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	5	REST ONSIBLE I ERSON	

Report Documentation Page

Form Approved OMB No. 0704-0188 These combat operations comprise both lethal and nonlethal effects to help shape an environment that enables the reconstruction of the country as a whole.

The 10th Mountain Division's Combined Task Force Warrior (CTF Warrior), which is the 1st Brigade Combat Team; the Combined Joint Special Operations Task Force (CJSOTF), which is the 19th Special Forces Group (Airborne); and the 354th Expeditionary A-10 Fighter Squadron are the task forces with the primary lethal delivery systems in theater. The main objective of these combat operations is to deny terrorist operatives sanctuary and eliminate all foreign-sponsored Taliban, Al Qaeda and Hizb-e Islami Gulbuddin (HIG) anti-Coalition Forces. (See Figure 2 for more details about the threats in Afghanistan.)

The larger part of Afghanistan circled on the map is relatively peaceful and stable. To ensure continued success and peace throughout Afghanistan, ongoing nonlethal efforts are spearheaded by the Combined Joint Civil-Military Operations Task Force (CJCMOTF) with the 321st Civil Affairs Brigade as the lead command element.

CJCMOTF efforts are accomplished through a civil-military coordinator who is based in Afghanistan's capitol, Kabul, near the seat of central government. Provincial reconstruction teams (PRTs) are deployed to help more than 30 provinces that are beginning to rebuild their infrastructure and to help a bureaucracy ravaged after more than 20 years of continuous war.

The "United States Policy Objective" is a "government of Afghanistan committed to and capable of preventing the re-emergence of terrorism on Afghan soil." This is the measurable end state that the CJTF-180 commander must achieve. Of the five threats to the Islamic Transitional Government of Afghanistan (ITGA) outlined in Figure 2, the two most powerful the CJTF-180 must counter are the anti-Coalition militants of the Al Oaeda and Taliban forces and the internal threats, including warlordism and poor governance. CTF Warrior and CJSOTF maintain focus on the former, while CJCMOTF, in concert with international and nongovernmental organizations (NGOs), focuses on the latter.

EBO Organization and Process. To understand EBO in this environment, you must understand who plans and executes EBO, who the staff proponent

for synchronization of effects in the CJTF is and what assets are available for producing the full spectrum of lethal and nonlethal effects.

Joint Effects Coordination Board (JECB). The JECB synchronizes the lethal and nonlethal execution of the

commander's intent for effects and is chaired by the Director of the Combined/Joint Staff (DCJS). The JECB is a targeting board that approves and synchronizes the targets and manages and allocates resources to achieve targeted effects throughout the CJOA.

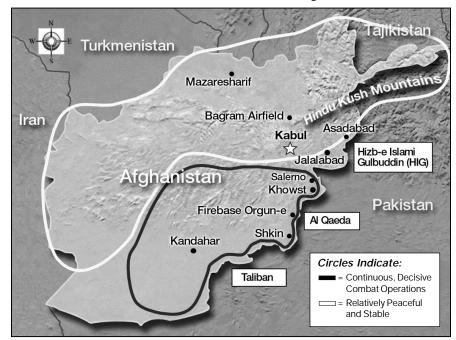


Figure 1: Afghanistan Combined/Joint Operations Area (CJOA)

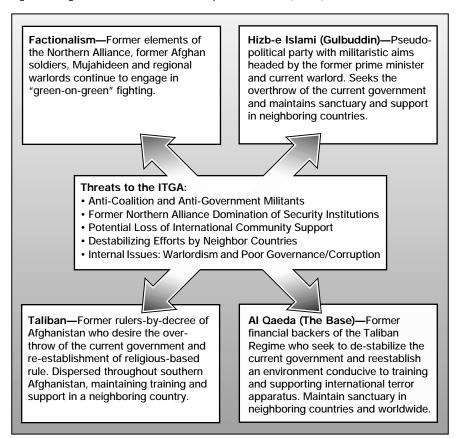


Figure 2: Threats to Islamic Transitional Government of Afghanistan (ITGA) and Anti-Coalition Forces



US and Romanian forces coordinate with local Afghan leader during operations in the southeastern provinces.

Similar to standard targeting boards, the JECB includes the CJ3 and CJ2, USAF Air Component Coordination Element Director, CJ3 Information Operations (IO) Planner and representatives from the Joint Intelligence Support Element (JISE), including the Collection Management and Dissemination (CM&D) section. Additionally, targeted kinetic action directed against anti-Coalition militants' command, control and communications (C3) nodes is achieved through the Joint Intelligence Support to Targeting (J2T), in which the FA Intelligence Officer (FAIO) is embedded. The JECB also includes representatives from CJSOTF, CTF Warrior, Staff Judge Advocate (SJA), Psychological Operations (PSYOP) and Public Affairs (PA).

Being a vital and ongoing part of the Decide, Detect, Deliver, Assess (D³A) targeting process, assessment is accomplished by all staff sections in the JECB. The JISE, IO and CMO elements provide key tactical assessments as a foundation for the "way ahead." Assessments are provided in relation to the desired effects for each discipline and are captured either quantitatively (JISE reporting) or qualitatively (IO or CMO reporting).

The JECB is organized and facilitated by the CJTF-180 Chief of Fires, the 10th Mountain Division Deputy Fire Support Coordinator (DFSCOORD). His mission is to synchronize effects using both lethal and nonlethal fires across the spectrum of operations. (See Figure 3.) The Chief of Fires and his JFE supervise the process, from developing the commander's effects guidance through collecting intelligence, nominating targets, allocating resources and executing and assessing the effects.

Joint Effects Working Group (JEWG). Weekly staff coordination is achieved through a JEWG, which essentially is a targeting working group. The recommendations of the JEWG are briefed to the JECB.

The JEWG, or targeting team, starts with the National Command Authority's

(NCA's) stated "United States Policy Objective" for the CJOA. Using the standard military decision-making process (MDMP), the Operations Planning Group (OPG) develops the commander's intent. The CJTF-180 commander's intent is defined along the three lines of operations: Enable Afghan institutions; Assist in removing the causes of instability, and Deny the enemy sanctuary and counter terrorism.

The JEWG staff develops the supporting effects that will accomplish each line of operation. The unique challenges in the process are not necessarily determining what actions might accomplish the effects, but determining the indicators to trigger actions as well as managing the limited assets or combination of assets that are best suited to facilitate the process.

Targeting Battle Rhythm. After publishing the operations order (OPORD), the OPG/JEWG begin a three-week battle rhythm resulting in a weekly fragmentary order (FRAGO) that refines or redirects EBO guidance. This guidance is for lethal and nonlethal targeting, collection requirements and priorities, IO synchronization priorities and CMO targeting recommendations.

A battle rhythm example is shown in Figure 4. Changes to operational guidance, as interpreted from CENTCOM and Joint Chiefs of Staff (JCS) planning orders (PLANORDs), are incorporated into the operational MDMP process on Monday (20 October), focusing on operations three weeks in advance (in this example, Week 24). The refined opera-

Lethal	Nonlethal	Nonmilitary	
Fixed-Wing Aircraft	Civil-Military Operations (CJCMOTF)	Provincial Reconstruction Teams (PRTs)	
Rotary-Wing Aircraft	Information Operations (IO), including Combat Camera	Other US Government Agencies, including USAID	
Field Artillery	Psychological Operations (PSYOP)	International Organizations	
Mortars	Public Affairs (PA)	Non-Governmental Organizations (NGOs)	
Convention Forces (CTF Warrior)	Theater & National Intelligence, Surveillance and Reconnaissance (ISR)		
Special Operations Forces (CJSOTF)	Conventional Forces (CTF Warrior)		
Coalition Forces	Special Operations Forces (CJSOTF)		
Afghan Militia Forces (AMF) & Afghan National Army (ANA)	Coalition Forces		

Figure 3: Assets Available for Effects-Based Operations in ITGA

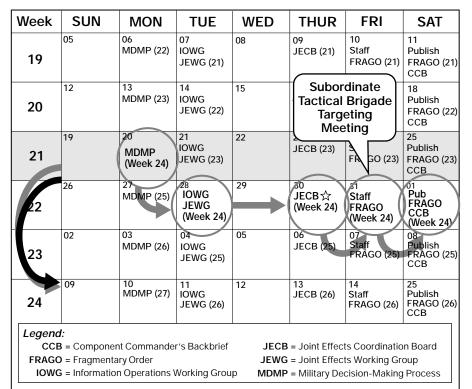


Figure 4: CJTF-180's Three-Week Battle Rhythm for EBO. This example shows the EBO process resulting in lethal and nonlethal actions to take in Week 24 that will lead to the effects to achieve the commander's intent.

tional guidance also is passed to the JEWG and Information Operations Working Group (IOWG) on Tuesday (21 October), which affects operations two weeks out.

The JEWG integrates the operational and tactical priorities of CJTF-180 into one consolidated briefing that focuses on tactical operations two weeks in advance and briefs them to the DCJS on Thursdays (30 October for Week 24). The relevant elements of the previous MDMP and IOWG have been integrated into the JEWG for deconfliction and synchronization. These elements include IO themes, objectives and messages, PSYOP products, press releases, regional prioritization and updated measures of effectiveness. The ultimate objective of the JEWG is to provide operational targeting solutions for achieving the commander's desired effects, solutions that can be translated into tactical operations.

During the JEWG, the DCJS approves several products that are integrated into the Saturday, 1 November FRAGO. Those items typically include the list in Figure 5.

For a thorough understanding of the three-week process, the following is an unclassified vignette of the steps taken to produce the commander's desired effects.

As a part of planning for Operation Mountain Viper, the JEWG determined that successful lethal attack of C³ targets in the Sami Ghar Mountain region of southern Afghanistan in the Kandahar Province would result in a disruptive effect, supporting the CJTF-180 commander's line of operation "Deny sanctuary and counter terrorism."

After the Mountain Viper OPORD was published, the JEWG fell into its normal battle rhythm. On Monday, 11 August, the MDMP identified a requirement for and recommended an increase

- Targeting Priorities and High-Payoff Targets (HPTs) by Category
- Priority Intelligence Requirements (PIRs)
- Target Selection Standards (TSS)
- · Collection Requirements and Priorities
- IO Synchronization Priorities
- Psychological Operations (PSYOP)
- Public Affairs (PA) Targeting Recommendations
- Civil-Military Operations (CMO) Targeting Recommendations
- Specific Rules of Engagement (ROE)

Figure 5: Typical Products Integrated into Fragmentary Orders (FRAGOs) to Execute Lethal and Nonlethal Effects

in intelligence, surveillance and reconnaissance (ISR) in the Sami Ghar region. This recommendation is forwarded to the OPG on the next Monday, 18 August, and to the JEWG on Tuesday, 02 September. The DCJS approved the recommendation at the Thursday, 04 September, JECB.

The collection priority had been published in the weekly FRAGO on 23 August. Based on the collection priorities in the weekly FRAGO, the Intelligence Collection Manager allocated signals intelligence (SIGINT), human intelligence (HUMINT) and imagery intelligence (IMINT) assets to identify and track the target, beginning the week of 7 September. Analysis of the ISR information validated the viability of the target by establishing an exploitable pattern.

As part of the synchronization process, the JEWG set assets in motion at its meeting on 2 September to prepare the area for lethal execution of the target. Host nation AM broadcasts were transmitted on radios distributed by CMO teams, instructing friendly civilians to avoid activities in the area. Distribution of posters and the conduct of face-to-face encounters by CMO teams as well as the deployment of Special Operations Forces (SOF) and other US government agencies (OGAs) were additional actions to protect friendly host nation civilians. Pre-drafted PA releases were on standby for release to national and international audiences, pending the outcome of follow-on phases.

During the JEWG on Tuesday, 9 September, the group reasonably discerned an opportunity to attack the Sami Ghar target. DCJS approved the target for attack at the 11 September JECB, and the target was placed on the CJTF-180 joint integrated prioritized target list (JIPTL). The transitory nature of the target required that, once the target was detected, the appropriate platform for attack was an AC-130U gunship.

On the night of 16 September, intelligence sources detected the target outside a remote village in the Sami Ghar Mountains. The JFE conducted a clearance-of-fires drill and used national imagery assets to perform a collateral damage assessment of the target area according to CENTCOM collateral damage requirements. The AC-130 identified the target and was cleared to engage it. This attack resulted in battle damage assessment (BDA) of eight enemy personnel killed.

That same evening, a scheduled unmanned aerial vehicle (UAV) identified approximately 25 Taliban fighters egressing down a narrow valley after the engagement. The JFE used this intelligence to plan further attacks in the objective area and clear it of insurgent activities.

On the heels of this lethal attack, CMO teams and PRTs were postured to enter the area to help local civilians. These teams were prepared to distribute aid packages, provide medical assistance and help rebuild infrastructure. The desired effect of these teams was to win the support of the populace in the CJOA.

This particular target was assessed as destroyed, based on this attack combined with a follow-on analysis of the target system in the weeks after the engagement. According to HUMINT sources and information from CMO teams dispatched to the area, recent Taliban activity in this area shows that fires had a significant disruptive effect.

Intelligence indicated that fighters in the area were instructed to break into two- to five-man teams to prevent presenting a large target to Coalition Forces. This intelligence and subsequent CMO operations in the region validated the effectiveness of the 16 September attack in the Sami Ghar region, helping to provide the desired effect of "Deny sanctuary and counter terrorism."

The technique for EBO discussed in this article is just that—a technique. The Institute for Defense Analyses study "New Perspectives on Effects-Based Operations" identifies seven attributes of EBO as outlined in Figure 6. CJTF-180 has interwoven these seven attributes into its EBO process, most prominently adapting to the operational environment and constantly evolving enemy (Number 5), and gaining the support of the Afghan National Army to secure the Afghan domestic situation (Number 6).

The key to CJTF-180's successfully executing EBO was the *focus on effects* achieved by the process—not the process itself. At times, CJTF-180 planners got mired in the process and ignored the effects being generated, thus they failed to adapt to the ever-changing enemy and take advantage of the effects they could have created.

Fire Supporters as Effects Supporters. Lieutenant Colonel Batschelet wrote of producing "desired futures." The desired future we, as fire supporters, collectively embrace is the contin-

- 1. The Need to Focus on Decision Superiority
- Applicability in Peace and War (Full-Spectrum Operations)
- 3. A Focus Beyond Direct, Immediate First-Order Effects
- 4. An Understanding of the Adversary's Systems
- 5. The Ability of Disciplined Adaptation
- The Application of the Elements of National Power
- The Ability of Decision Making to Adapt Rules and Assumptions to Reality

Figure 6: Seven Attributes of EBO. Information taken from a study "New Perspectives on Effects-Based Operations" by the Institute for Defense Analyses, Alexandria, Virginia, (30 June 2001) as quoted in Lieutenant Colonel Al Batshcelet's Army War College paper "Effects-Based Operations: A New Operational Model?"

ued prominence of our position in the profession of arms. As Artillerists, we must continue to provide accurate, timely indirect fires; it is our heritage and the hallmark of our branch. But we must move forward from fires coordinators to effects coordinators.

Who better to derive the maneuver commander's intent for "effects support?" Is it not a logical evolution? Fire supporters historically have coordinated and synchronized mortar, artillery and aerial fires to delay, disrupt and destroy the enemy; now we must embrace the nonlethal and non-military agencies, the likes of which are managed by CJTF-180.

We must begin developing the "Effects Supporters" who will accompany the maneuver commanders of the future. An FA lieutenant, as an "Effects Support Team" (EST) leader, must understand how to employ lethal and nonlethal assets to realize the maneuver company commander's vision of future operations. He must be able to work with civil affairs teams, special operations, coalition and host-nation forces, as well as NGOs and OGAs.

In CJTF-180, the Chief of Joint Fires synthesizes and facilitates EBO. He and his JFE supervise the process from developing the commander's effects guidance all the way through assessing the results. As the CJTF-180 Effects Coordinator, the Chief of Joint Fires is the proponent of EBO and, along with a dedicated group of professionals from across the lethal and nonlethal spectrum, has turned this concept into reality. CJTF-180 is executing EBO today,

meeting the commander's intent and having a tremendous impact in the global War on Terrorism.

Much talk has been generated and much ink spilled regarding Army transformation. As the Army's synchronizers, fire supporters must become the lead proponent for the effects coordination process. Previously, Redlegs massed walls of hot steel to ensure our maneuver brethren were successful. Today and in the near future, we will continue to "mass" effects in a more complex operating environment. This may require hot steel, but also, and perhaps more importantly, it may require an array of cascading effects that wins friends, destroys enemies and produces desired futures for the 21st century maneuver commander.

Endnotes:

- 1 US Joint Force Command (JFCOM) Glossary: http://www.jfcom.mil/about/glossary.htm#E.
- 3 Lieutenant Colonel Allen W. Batschelet, "Effects-based Operations: A New Operational Model?" (Carlisle Barracks, PA: US Army War College, 9 April 2002).
 4. Ibid.



Major Robert B. (Brad) Herndon is the 10th Mountain Division (Light Infantry) Artillery S3, Fort Drum, New York. He recently served as the Combined Joint Task Force (CJTF)-Mountain Fires Chief in Operation Enduring Freedom (OEF) in Afghanistan and, previously, as the Fire Support Officer for 2d Brigade, 10th Mountain Division, in Afghanistan for Operation Anaconda, also in OEF.

Chief Warrant Officer Three John A. Robinson is the 10th Mountain Division Targeting Officer and has served as the CJTF-180 Targeting Officer since May 2003. He also served as the Targeting Officer for CJTF-Mountain in Afghanistan in OEF.

Colonel James L. Creighton commands the 10th Mountain Division Artillery. He served as the Assistant Operations Officer for 4th Battalion, 3d Field Artillery, part of the 2d Armored Division (Forward) attached to the 1st Infantry Division (Mechanized) during Operations Desert Shield and Storm in the Gulf.

Lieutenant Colonel Raphael Torres is the 10th Mountain Division Deputy Fire Support Coordinator and has served as the CJTF-180 Chief of Joint Fires in Afghanistan since August 2003.

Major Louis J. Bello is the 10th Mountain Division Artillery Executive Officer. He served as the CJTF-Mountain Fires Chief in OEF and Deputy Fires Chief during Operation Anaconda, both in Afghanistan.